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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/242,814	06/25/1999	MASAHIKO ENARI	450101-4460	1541

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EXAMINER

ELALLAM, AHMED

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 07/12/2004

*11*

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/242,814

Applicant(s)

ENARI ET AL.

Examiner

AHMED ELALLAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16, 19-22 and 25-27 is/are rejected.
- 7) ☒ Claim(s) 15, 17, 18, 23 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what is meant by the followings:

“registering means for registering the information of the materials to be sent out”.

It is not clear what is meant by registering means for registering the information of the digital data to be sent out. More specifically, the specification involves several steps in conjunction with several entities that provide different stages of “registration”, and that taking the limitation as a whole cast a doubt to what exactly meant by the registering means for registering the information to be sent out. The meaning is vague.

Regarding claims 2-7, claims 2-7 depend from claim 1, thus they are subject to the same rejection.

Regarding claim 8, claim 8 has a registering step that is similar in scope to the registering of claim 1, thus it is subject to similar rejections of claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 8-12, 19-21, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Esch et al, US (5,283,639).

Regarding claim 1, with reference to figures 3 and 4, Esch discloses a multi-channel digital data sending-out apparatus comprising:

- network management 64 for managing information gathered from a plurality of information sources 73-76, (claimed management means for supervising information gathered from at least one information source); see column 7, lines 22-25;
- quality control station 62, for controlling the quality and confirming and approving the digital data to be sent out, see column 7, lines 14-21, (claimed programming means for supervising information of digital data being sent out and controlling the progress of digital data to be sent out);
- a content database 76, (claimed registering means for registering the information of the digital data to be sent out);
- a live data base 82, (claimed holding means for holding the digital data);
- transmitter 84 for sending digital data held by the live database 82 to satellite 77, see column 6, lines 33-48, (claimed sending-out means for

sending out the digital data held by the holding means to a transmission path as a multi-channel digital data);

- a Local Area Network (LAN) 51 for interconnecting network management 64, quality control station 62, a content database 76 and transmitter 84), (claimed connection means for interconnecting the management means, programming means, registering means, holding means and the sending out means to permit each of the means to access at least one other of the means).

Regarding claim 3, Esch discloses a control processor 78 that maintains overall control of the system and dispatches tasks to, and coordinates the operation of the other processors, see column 6, lines 49-53. (Examiner interpreted the overall control and dispatching of tasks to the other processor of the system as the claimed send-out management means for controlling the sending out of the multi-channel digital data and the means for monitoring the sending out of the multi-channel digital data).

Regarding claim 4, Esch discloses a network processor 83 that format and convert the content data signal, packetizes the data signals, and schedule data signals with video signals, and transmit the formatted and converted into data streams, see column 6, lines 33-45. (Claimed conversion means for converting the format of the digital data held by the holding means into a transmission format, and for multiplexing time information service identification information, and service management information). (Examiner interpreted scheduling content data as been the claimed service management information and the packetizing the data signals, and schedule data

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signals with video signals as the claimed multiplexing time information service, identification information, and service management information, because it is a standard that video content have time and service identification information).

Regarding claim 8, with reference to figures 3 and 4, Esch discloses a multi-channel digital data sending-out apparatus comprising:

- network management 64 for managing information gathered from a plurality of information sources 73-76, (claimed management step for supervising information gathered from at least one information source); see column 7, lines 22-25;
- quality control station 81, for controlling the quality and confirming and approving the digital data to be sent out, see column 7, lines 14-21, (claimed programming step for supervising information of digital data being sent out and controlling the progress of digital data to be sent out);
- a content database 76, (claimed registering step for registering the information of the digital data to be sent out);
- a live data base 82, (claimed holding step for holding the digital data);
- transmitter 84 for sending digital data held by the live database 82 to satellite 77, see column 6, lines 33-48, (claimed sending-out step for sending out the digital data held by the holding step to a transmission path as a multi-channel digital data);
- a Local Area Network (LAN) 51 for interconnecting network management 64, quality control station 62, a content database 76 and transmitter 84),

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(claimed connection step for interconnecting the processing operations of the management step, programming step, registering step, holding step and the sending out step so that the processing operation at each step of the steps will be associated with the processing operation of at least one other of the steps).

Regarding claim 9, with reference to figure 3, Esch discloses a multi-channel digital data sending-out apparatus comprising:

- live data base 82 for holding content signals, (claimed holding means for holding digital data to be sent out);
- network processor 83 that draws content information from the live data base 82, see column 6, lines 33-45, (claimed reproducing means for reading out and reproducing the digital data held by the holding means);
- modulator 85, that format the content signals converted by the network processor 83, (claimed encoding means for real-time encoding of digital data reproduced by the reproducing means); see column 6, lines 33-45
- network processor 83 that format and packetizes the content data signals, see column 6, lines 33-55, (claimed conversion means for converting the format of the digital data held by the holding means);
- transmitter 84 for sending digital data converted by the network processor through a communications channel, see column 6, lines 33-55, (claimed sending-out means for sending out the digital data

converted by the conversion means to the transmission path as a multi-channel digital data); see column 6, lines 33-55;

- a Local Area Network (LAN) 51 for interconnecting live database 82, network processor 83, modulator 85, and transmitter 84. see column 6, lines 33-55. (Claimed connection means for interconnecting the holding means; reproducing means; encoding means, conversion means and sending-out means to permit each of the means to access at least one other of the means).

Regarding claim 10, Esch discloses that the network processor 83 format and convert the content data signal, packetizes the data signals, and schedule data signals with video signals, and transmit the formatted and converted into data streams, see column 6, lines 33-45. (Claimed conversion means multiplexes time information service, identification information, and service management information). (Examiner interpreted scheduling content data as been the claimed service management information and the packetizing the data signals, and schedule data signals with video signals as the claimed multiplexing time information service, identification information, and service management information, because it is a standard that video content have time and service identification information).

Regarding claim 11, claim 11 is a method steps that has substantially the same scope of the means claim 9, thus it is subject to the same rejection.

Regarding claim 12, with reference to figures 3 and 4, Esch discloses a multi-channel digital data sending-out apparatus comprising:



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- live database 82 for holding a plurality of content data signals, see column 6, lines 33-45, (claimed holding means for holding digital data to be sent out);
- a network processor 83 that format and convert the content data signal, and transmit the formatted and converted into data streams, see column 6, lines 33-45. (claimed conversion means for converting the format of the digital data held by the holding means into a format for transmission);
- a transmitter 84 that transmit the digital data converted by the network processor over a communication channel to satellite 77. see column 6, lines 46-48. (claimed a sending out means for sending out the digital data converted by the conversion means to a transmission path as a multi-channel digital data). (Examiner interpreted the communication channel between the central site and the satellite as the claimed multi-channel);
- a control processor 78 that maintains overall control of the system and dispatches tasks to, and coordinates the operation of the other processors, see column 6, lines 49-53. (Examiner interpreted the overall control and dispatching of tasks to the other processor of the system as the both claimed monitoring means and supplying means).

Regarding claim 19, Esch discloses a quality control processor 81 that assembles, schedule and display content information, and that rejected video content is returned to the appropriate creation department (claimed progress table). See column 6,

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lines 24-33. (Examiner interpreted the returned video content as the claimed reproduced digital data, and the video content that is rejected is returned to the appropriate creation department as the claimed progress table).

Regarding claim 20, claim 20 is a method steps that has substantially the same scope of the means claim 12, thus it is subject to the same rejection.

Regarding claim 21, with reference to figures 3 and 4, Esch discloses a multi-channel digital data sending-out apparatus comprising:

- a scheduling processor 71 (claimed programming means) coupled to a schedule database 72. The scheduling processor 71, in response to each of the plurality of content data signals generates a schedule data signal, which is stored in schedule data base 72. The schedule database 72 includes scheduling information for merging content data signals with the video signals. (Examiner interpreted the schedule database 72 as the claimed holding means for holding the information of the digital data, the progress information and any other information necessary for sending out the digital data). The scheduling processor 71 logs each content data signal received, assigns a unique identifier, records accounting, administrative data, schedules, and, if necessary schedules creation work (claimed programming means for supervising the information of digital data to be sent out, programming the digital data as to be sent out as to its progress, and for generating progress information). See column 6, lines 11-32.

- a modulator 85 for modulating converted data received from the network processor 83, see column 6, lines 33-45. (Claimed conversion means for converting the format of the digital data held by the holding means into a format for transmission);
- a transmitter 84 that transmit the digital data converted by the network processor over a communication channel to satellite 77. see column 6, lines 46-48. (Claimed a sending out means for sending out the digital data converted by the conversion means to a transmission path as a multi-channel digital data). (Examiner interpreted the communication channel between the central site and the satellite as the claimed multi-channel);
- quality control station 81, for controlling the quality and confirming and approving the digital data to be sent out, see column 6, lines 11-23 and column 7, lines 14-21, (claimed monitoring means for monitoring the programming means, conversion means or sending out means as to malfunctioning thereof so that required information held by the holding means is supplied to the programming means, conversion means or sending-out means).

Regarding claim 26, with reference to figure 3, Esch shows different studio 73-75 that supply information data to be processed and transmitted when it is desired. (Claimed auxiliary holding means for holding at least a one-day installment of the information held by the holding means). See column 6, lines 4-10.

Regarding claim 27, claim 27 is a method step claim and have the same scope means claim 21, thus it is subject to the same rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 14, 16, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esch in view of Boutal et al, automatic and remote control broadcast television and radio transmitting stations, proceeding of the institution of electrical engineers, GB Vol. 126, November 1979, pages 1069-1096. (Hereinafter referred to simply as Boutal).

Regarding claims 2, 16 and 22, Esch discloses substantially all the limitations of respective base claims 1, 12 and 21, except it doesn't disclose the transmitter (sending out means) comprises first sending-out means for doing sending processing, second sending-out means for doing sending processing, and switching means for switching one of the first sending-out means or the second sending out means to the other if one of said first or second sending out means is in disorder. (Examiner interpreted this limitation as being a backup transmitter that can be used in the alternative in case of a fault in either transmitter).

However, Boutal in the same field of endeavor, discloses that duplication is used in transmitter-system design that employed a reserve transmitter that is switched to in case of a fault. See right column, page 1070, lines 4-21. (Examiner interpreted the teaching of Boutal as being the claimed limitation of claim 2, 16 or 22).

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time of the invention to implement the transmitter duplication switching taught by Boutal in Esch's system so that real-time back up transmission can be provided, resulting in a reliable content-delivery system of Esch. The advantage would be less disruption to the viewers of Esch.

Regarding claim 14, Esch discloses substantially all the limitations base claim 12, except it does not disclose detection means for detecting a level of the digital data

However, Boutal discloses in the same field of endeavor, an automatic detection mechanism in which a level of sound (digital data) is detected.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time of the invention to provide the means for carrying the level detection method as taught by Boutal in Esch's system so that level based power transmission control can be implemented in transmitting Esch's data streams. The advantage to Esch's system would be the ability to adapt in case of fluctuating noise situations in transmitting data over the communications channel.

Regarding claim 25, Esch discloses substantially all the limitations of base claim 12, except it does not disclose a current operating converting means and standby

converting means in case of malfunctioning of the current operating system converting means.

However, Boutal in the same field of endeavor, discloses that duplication is used in transmitter-system design that employed a reserve transmitter that is switched to in case of a fault. See right column, page 1070, lines 4-21. (Examiner interpreted the teaching of Boutal as being the claimed current operating converting means (i.e. the working transmitter, and standby converting means (i.e. the standby transmitter) in case of malfunctioning of the current operating system converting means.

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time of the invention to implement the transmitter duplication switching taught by Boutal in Esch's system so that real-time back up transmission can be provided, resulting in a reliable content-delivery system of Esch. The advantage would be less disruption to the viewers of Esch.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Esch in view of Gulla et al, WO 97/06637.

Regarding claim 13, Esch discloses substantially all the limitations base claim 12, except it does not disclose monitoring digital data transmitted from the transmitter, received and demodulated. (Claimed monitoring means further monitors digital data transmitted to the transmission path from sending out means received and demodulated).

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However, with reference to figure 2, Gulla disclose monitoring digital data transmitted from a transmitter, received and demodulated. See page 8, lines 20-28

Therefore, it would have been obvious to an ordinary person of skill in the art, at the time of the invention was made to be motivated to implement the monitoring of Gulla in Esch system so that a degree of certainty is added to the state of data being sent. The advantage would be a guaranteed quality level of data performance in a real-time transmission in Esch's data stream transmission.

#### ***Allowable Subject Matter***

5. Claims 5-7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 15, 17, 18, 23 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claim 9, 11, 12 and 20 have been considered but are moot in view of the new ground(s) of rejection.

**Claim objection:**

The objection to claims 4-6, 10-12, 14, 21 and 27 is withdrawn in view of the amendment to these claims.

**112 2<sup>nd</sup> Rejections:**

Applicant did not respond to the rejection under 112nd paragraph with reference to the registering means. Examiner maintained the rejection of claims 1-8.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

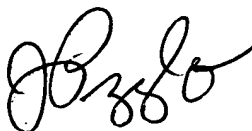
Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (703) 308-6069. The examiner can normally be reached on 9-5:30.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2662  
7/9/2004



**JOHN PEZZLO**  
**PRIMARY EXAMINER**